

Appendix H – Pavement Core Materials Testing

**TEST REPORT**

Test Report No.: 09680001
Report Date: 10/14/2014

☒ **Original**

☐ **Amended**

Page 1 of 2

Client:	Project No.: WO# 968
Underwood Engineering 25 Vaughan Mall Portsmouth, NH 03801	Description: Miscellaneous Mixture Testing
Report Distribution:	
Sample No.: Cole Melendy, Jo Daniel	Date Received: 10/6/14
Sample Description: 2 core samples.	
Technical Responsibility	Technical Contact
Name: Robert Bennett	Name: Donald P. Jack
Title: Senior Laboratory Technician	Title: Laboratory Manager
Signature:	Signature:
Date:	Date:
Comments: - This a true record of test results obtained by Advanced Asphalt Technologies, LLC in accordance with the test methods and procedures stipulated by AASHTO/ASTM.	

Report of AC Content, Gradation and Air Voids of Core Samples

TEST REPORT

Test Report No.: 09680001
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Page 2 of 2

Table 1 Summary of Properties

Sieve Size		B-5	B-8
in	mm	<i>Percent Passing,</i>	
1 1/2	37.5	100.0	100.0
1	25.0	100.0	100.0
3/4	19.0	100.0	100.0
1/2	12.5	81.2	75.8
3/8	9.5	66.4	61.6
No 4	4.75	43.4	41.3
No 8	2.36	31.7	32.7
No 16	1.18	24.2	26.3
No 30	0.6	18.7	20.5
No 50	0.3	13.2	14.3
No 100	0.15	8.8	9.2
No 200	0.075	6.0	6.1
Gmb	AASHTO T166	2.214	2.362
Gmm	AASHTO T209	2.496	2.481
Air Voids	%	11.3	4.8
Measured AC, % by AASHTO T164		4.51	4.52

100
 90-100
 2-90
 20-49
 2-8

4.7

TEST REPORT

Test Report No.: 09680002
Report Date: 10/14/2014

☒ **Original**

☐ **Amended**

Page 1 of 42

Client: Underwood Engineering 25 Vaughan Mall Portsmouth, NH 03801		Project No.: WO# 968	
		Description: Recover and grade	
Report Distribution: Cole Melendy, Jo Daniel			
Sample No.: RC2279		Date Received: 10/6/14	
Sample Description: Core B-5			
Technical Responsibility		Technical Contact	
Name: Robert Bennett		Name: Donald P. Jack	
Title: Senior Technician		Title: Laboratory Manager	
Signature:		Signature:	
Date:		Date:	
Comments: - This a true record of test results obtained by Advanced Asphalt Technologies, LLC in accordance with the test methods and procedures stipulated by AASHTO/ASTM.			

Report for Performance Grade on Recovered Binder

TEST REPORT

Test Report No.: 09680002
 Report Date: 10/14/2014

☒ Original

☐ Amended

Page 2 of 4

Table 1 Binder Recovered by AASHTO T-170 Method A, Graded According to AASHTO R29

Test	Method	Test Result Core B-5 RC 2279	Specification
<i>Recovered Binder</i>			
Dynamic Shear, $G^*/\sin\delta$ (kPa), at 76°C 82°C	AASHTO T315	3.13 1.51	
<i>PAV Residue</i>			
Dynamic Shear, $G^*\sin\delta$ (kPa), at 28°C 25°C	AASHTO T315	4600 6390	
Creep Stiffness and Slope, at 60 s and -12°C S(MPa) / m-value -18°C S(MPa) / m-value	AASHTO T313	231 / 0.299 434 / 0.252	
Continuous Grade, °C High Intermediate Low S Low m-value	AASHTO M320	81.4 27.2 -24.5 -21.9	Min, 2.2 kPa Max, 5000 kPa Max, 300 MPa Min, 0.300

**TEST REPORT**

Test Report No.: 09680003

Report Date: 10/14/2014

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Page 1 of 4

Client: Underwood Engineering 25 Vaughan Mall Portsmouth, NH 03801	Project No.: WO# 968
	Description: Recover and grade
Report Distribution: Cole Melendy, Jo Daniel	
Sample No.: RC2280	Date Received: 10/6/14
Sample Description: Core B-8	
Technical Responsibility	Technical Contact
Name: Robert Bennett	Name: Donald P. Jack
Title: Senior Technician	Title: Laboratory Manager
Signature:	Signature:
Date:	Date:
Comments: - This a true record of test results obtained by Advanced Asphalt Technologies, LLC in accordance with the test methods and procedures stipulated by AASHTO/ASTM.	

Report for Performance Grade on Recovered Binder

TEST REPORT

Test Report No.: 09680003
 Report Date: 10/14/2014

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☐ Amended

Page 2 of 4 ✓

Table 1 Binder Recovered by AASHTO T-170 Method A, Graded According to AASHTO R29

Test	Method	Test Result Core B-8 RC 2280	Specification
<i>Recovered Binder</i>			
Dynamic Shear, $G^*/\sin\delta$ (kPa), at 70°C 76°C	AASHTO T315	4.40 2.04	
<i>PAV Residue</i>			
Dynamic Shear, $G^*\sin\delta$ (kPa), at 25°C 22°C	AASHTO T315	4960 7050	
Creep Stiffness and Slope, at 60 s and -12°C S(MPa) / m-value -18°C S(MPa) / m-value	AASHTO T313	222 / 0.304 385 / 0.234	
Continuous Grade, °C High Intermediate Low S Low m-value	AASHTO M320	75.4 24.9 -25.4 -22.3	Min, 2.2 kPa Max, 5000 kPa Max, 300 MPa Min, 0.300